



United States Department of the Interior
Fish and Wildlife Service

Arizona Ecological Services Field Office

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In Reply Refer To:

AESO/SE

2-21-95-I-244

February 13, 1996

Mr. Clyde Morris
Chief, Sourcewater Protection Section
USEPA, Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Dear Mr. Morris:

This letter is in response to your January 31, 1995, request for consultation regarding hazards of sulfate-based mining operations to migratory birds. The Service is unaware of any such mining operations in Arizona or Nevada that are currently required to exclude migratory birds from raffinate and pregnant leach solution (PLS) ponds. In the desert southwest, we suspect migratory birds may be attracted to any type of open water. However, to our knowledge, there have been no studies to assess the frequency and duration of waterbird use of raffinate and PLS ponds or the potential effects of pond water on the birds.

The lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*) (endangered) may also occur in the project area. However, it has not been determined if this bat frequents raffinate and PLS ponds.

The Service suggests that these ponds be monitored on a regular basis. If bird or bat mortality is noticed, appropriate State and Federal authorities should be notified and appropriate remedial action should be undertaken.

It may be in the mining industries best interest to fund a scientific study to assess the attractiveness of sulfate-based ponds to wildlife and determine potential adverse effects, if any, on bats and migratory birds. To date, there are no scientific data on which to base an opinion.

If you have any questions or need clarification on any of the above, please contact Kirke King or me.

Sincerely,

Sam F. Spiller
Field Supervisor

Mr. Clyde Morris

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cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (GM:GSV/LCR)
Peter Hyde, Arizona Department of Environmental Quality, Phoenix, AZ